

that in autumn it becomes a russet-brown, without the brilliant yellow tone of ordinary sugar maples. The branches are strongly ascending and the foliage is all borne at the tips of the branchlets, so that from without the tree appears densely leafy, but close to, when viewed from below, it has an open ladder-like appearance. The tree is one of the curiosities of the region,¹ sometimes reproduced on picture post-cards, one of which Mr. Cook supplied me in 1917. In attempting to clear off accumulations of specimens from past seasons I find the material and the photograph and, since the tree seems not to have a definite name, I am calling it

ACER SACCHARUM Marsh., forma **conicum**, f. nov. (fig.).
Arbor conicus ramis adscendentibus apice foliosis.—NEW HAMPSHIRE: open, rocky pasture, North Woodstock, specimens collected September 18, 1917, M. L. Fernald, TYPE in Gray Herbarium.—M. L. FERNALD.

A SUPPOSED HYBRID BETWEEN THE OAK SPECIES Q. RUBRA AND ILICIFOLIA

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THE Red Oak, *Quercus rubra* L., and the Bear Oak, *Q. ilicifolia* Wang., are very common elements in the flora of the area embraced by the Shenandoah National Park in Virginia. Both species produce a dominant cover in some sections of this area, and are found on the highest peaks of the Skyline drive, namely Marys Rock, 3514 ft., Stony Man, 4010 ft., and Hawksbill, 4049 ft. On the high peaks, at least, the former sometimes appears to pass into the variety *ambigua* (Michx.) Fernald, with much deeper and more turbinate cups. Specimens of this type may be found on the Hawksbill near its highest point. In the same vicinity and elsewhere individuals occur producing the flat saucer-shaped cup of typical *rubra*. Both the Red Oak and the dwarf Bear Oak grow in close proximity in many localities, even on the highest peaks.

On September 23, 1933 the writer found on Little Stony Man several dwarf specimens of an oak bearing all the ear-marks of a hybrid involving *rubra* and *ilicifolia* parentage. The shrubs had the low scraggy growth of *ilicifolia* and were fruiting heavily. The

¹ On May 25, 1934, passing through North Woodstock with a class of students, we noted the roadside sign "THE MYSTERY TREE" pointing to the conspicuous tree which looked vigorous and as perfect in form as in 1917.

leaves, of the general shape of *ilicifolia* but larger and with more bristle points on the lobes, are nearly smooth and green beneath as in *rubra*, not having the close persistent white-downy pubescence of *ilicifolia*. The twigs, likewise, are smooth and reddish in color as in the case of *rubra*. The fruit is somewhat larger than that of *ilicifolia*, with the shallow flat cup of *rubra*. The acorn is more of the shape of *rubra*, but with the light and dark longitudinal stripes or bands often present on typical *ilicifolia* acorns. Large quantities of acorns were secured from these dwarf individuals, and planted to observe the genetic behavior of this interesting form. Specimens have been placed in the United States National Herbarium.

A number of supposed hybrids between the Bear Oak and other species of the Black Oak group have been recognized, involving crosses with *velutina* (\times *Q. Rehderi* Trel.); with *phellos* (\times *Q. Giffordi* Trel.); with *marilandica* (\times *Q. Brittonii* Davis); with *coccinea* (\times *Q. Robbinsii* Trel.); with *rubra* var. *ambigua* (\times *Q. Lowellii* Sarg.), the latter having been found at Seabury, York Co., Maine.

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WOLFFIA IN MASSACHUSETTS.—Last August, while collecting specimens of *Zizania* in a small marsh near Northampton, I noticed a green coating on the surface of the water which was apparently due to some member of the *Lemnaceae*. This proved to be almost a pure colony of *Wolffia columbiana*. The marsh is located in the Northampton-Easthampton meadows (Mt. Tom Station) along a small tributary of the Connecticut river oxbow; although the plant may be present in the oxbow itself, I have not seen it there. *Wolffia* has been reported from several places in Connecticut and from Lake Champlain, but this seems to be the first record of the genus in Massachusetts. It may have been very easily overlooked in other localities.—WAYNE E. MANNING, Smith College.

Volume 36, no. 425, including pages 133-196 and plates 284 and 285, was issued 12 May, 1934.